

23

ABSTRACT OF THE PREMIUMS  
OFFERED BY THE  
SOCIETY, INSTITUTED AT LONDON  
FOR THE ENCOURAGEMENT OF ARTS,  
MANUFACTURES, AND COMMERCE.



London: Printed, by Order of the SOCIETY, by JOHN NICHOLS,  
Red Lion Passage, Fleet-street. 1797.

To the PUBLICK.

**T**HE CHIEF OBJECTS of the attention of the SOCIETY, in the application of their REWARDS, are all such useful inventions, discoveries, or improvements (though not mentioned in the Book of Premiums), as appear to have a tendency to promote the arts, manufactures, and commerce, of this kingdom; and, in pursuance of this plan, the Society have already been enabled, by the voluntary subscriptions of its members, and by benefactions of the nobility and gentry, to expend for such useful purposes a sum amounting to near forty thousand pounds.

Whoever attentively considers the benefits which have arisen to the Publick since the institution of this Society, by the introduction of new manufactures, and the improvements of those formerly established, will readily allow, no money was ever more usefully expended; nor has any nation received more real advantage from any public body whatever than has been derived to this country from the rewards bestowed by this Society; and this observation will be confirmed by inspecting a general account of the effects of the rewards bestowed by the Society, annexed to a work in folio, printed in 1778, intitled, "A Register of the Premiums and Bounties given by the Society, instituted at London, for the Encouragement of Arts, Manufactures, and Commerce, from the Original Institution in 1754, to 1776, inclusive;" which work may be seen by any person, applying to the Secretary, or other officers of the Society, at their house in the *Adelphi*.

In order still farther to promote the laudable views of this institution, and to enable the Society to prosecute to greater effect the work so successfully begun, it may not be improper to inform the Publick, by what mode, and on what terms, Members are elected.—Peers of the realm, or Lords of Parliament, are, on their being proposed at any meeting of the Society, immediately balloted for; and the name, with the addition and place of abode, of every other person proposing to become a Member, is to be delivered to the Secretary, who is to read the same, and properly insert the name in a list of candidates, to be hung up in the Society's room until the next meeting, at which such persons shall be balloted for; and, if two-thirds of the Members then voting ballot in his favour, he shall be deemed a Perpetual Member, upon payment of *twenty guineas* at one payment, or a Subscribing Member, upon payment of any sum, not less than *two guineas*, annually.

Every Member is equally entitled to vote, and be concerned in all the transactions of the Society, and its several Committees.

The

The meetings of the Society are held every *Wednesday*, at six o'clock in the evening, from the fourth *Wednesday* in *October*, to the first *Wednesday* in *June*. And the several Committees, to whose consideration the various objects of the Society's attention are referred, meet on the other evenings in every week during the session.

All candidates are to take notice, that no claim for a premium will be attended to, unless the conditions of the advertisements are fully complied with.

The several candidates and claimants, to whom the Society shall adjudge premiums or bounties, during their next session, are to attend at the Society's office in the Adelphi, on the last Tuesday in May, 1798, at twelve o'clock at noon, to receive the same, that day being appointed by the Society for the distribution of their rewards; before which time no premium or bounty will be delivered.

It is required, that the matters, for which premiums are offered, be delivered in without names, or any intimation to whom they belong; that each particular thing be marked in what manner each claimant thinks fit, such claimant sending with it a paper sealed up, having on the outside a corresponding mark, and on the inside the claimant's name and address; and the candidates in the Polite Arts are to signify their ages, and whether their Drawings be Originals or Copies.

All the Premiums of this Society are designed for Great Britain, except those offered for the advantage of the British Colonies.

The Fifteenth volume of the Transactions of this Society is now in the press, and will speedily be published, when it may be had at the Society's house in the Adelphi; and of the principal booksellers in England and Wales; in which book will be found the particulars of each premium inserted in the following Abstract, and the methods to be pursued by those who intend to become candidates; together with many papers communicated to the Society, in the several branches of Arts, Manufactures, and Commerce, which are the immediate objects of their attention and encouragement; and it is recommended to all Candidates to consult that book, in order that mistakes in making their claims may be avoided.

*Adelphi, April 13, 1797.*

By Order, SAMUEL MORE, Secretary.

## PREMIUMS FOR PLANTING AND HUSBANDRY.

### CLASS.

1. **ACORNS.** For having set ten acres, between *October*, 1796, and *April*, 1797; the gold medal.

2. For five acres; the silver medal.

*Certificates* to be produced on the first Tuesday in November, 1797.

9. **RAISING OAKS.** Not fewer than five thousand, from plants, or acorns; the gold medal.

10. For three thousand; the silver medal.

*Certificates* to be produced on the first Tuesday in January, 1798.

15. **RAISING OAKS.** For ascertaining the comparative merits of the different modes of raising Oaks for timber; the gold medal.

*Accounts* to be produced on the first Tuesday in November, 1797.

17. **OAK TIMBER IN COMPASS FORMS.** For ascertaining, by experiment, the best method of training Oaks, not fewer than one hundred, into compass forms for ship-building; the gold medal, or fifty guineas.

*Certificates* to be produced on the last Tuesday in December, 1805.

18. **SPANISH CHESNUTS.** For setting six acres between the 1st of October,

1796, and *April*, 1797, with or without seeds or cuttings of other trees; the gold medal.

19. For four acres; the silver medal.

*Certificates* to be produced on the first Tuesday in November, 1797.

26. **ENGLISH ELM.** For eight thousand, planted between *June*, 1795, and *June*, 1796; the gold medal.

27. For five thousand; the silver medal.

*Certificates* to be delivered on the first Tuesday in April, 1798.

34. **LARCH.** For planting, from *June*, 1794, to *June*, 1795, five thousand, the gold medal.

35. For three thousand; the silver medal.

*Certificates* to be delivered on the last Tuesday in December, 1797.

44. **SILVER FIR.** For not fewer than two thousand, planted between *June*, 1793, and *June*, 1794; the gold medal.

45. For one thousand; the silver medal.

*Certificates* and *accounts* to be delivered on the last Tuesday in December, 1797.

50. **OSIERS.** For not less than five acres, planted between the 1st of *January* and the 1st of *June*, 1797, not fewer than twelve thousand on each acre; the gold medal, or thirty guineas.

51. For



51. For three acres; the silver medal, or ten guineas.

*Certificates* to be produced on the last Tuesday in November, 1797.

54. ALDER. For having planed, in the year 1794, at least three thousand; the gold medal.

*Certificates* to be produced on the last Tuesday in December, 1797.

58. ASH. For six acres planted in 1794; the gold medal.

59. For not less than four acres; the silver medal.

*Certificates* to be produced on the last Tuesday in December, 1797.

68. TIMBER-TREES. For having enclosed, and planted or sown, ten acres with Forest trees for timber, between October, 1793, and May, 1795; the gold medal.

*Certificates* to be produced on the first Tuesday in November, 1797.

72. PLANTING ORCHARDS. For planting an Orchard in the most judicious manner, not less than four acres, after the month of August, 1796; the gold medal, or fifty guineas.

73. For the next in merit; the silver medal, or thirty guineas.

*Certificates* to be produced on the first Tuesday in November, 1815.

74. ORCHARDS. For the Orchard which, at the end of three years after planting, shall shew the greatest promise of success; the gold medal, or thirty guineas.

*Certificates* to be produced on the first Tuesday in November, 1799.

78. SECURING PLANTATIONS OF TIMBER. For satisfactory accounts of securing Timber-trees from hares, cattle, &c.; the silver medal, or twenty guineas.

*Accounts and certificates* to be produced on the first Tuesday in November, 1797.

*The candidates for planting all kinds of trees are to certify, that the respective plantations are properly fenced and secured, and particularly to state the condition the plants were in at the time of signing such certificates.*

*Any information which the candidates for the foregoing premiums may chuse to communicate, relative to the methods made use of in forming the plantations, or promoting the growth of the several trees, or any other observations that may have occurred on the subject, will be thankfully received.*

80. PREVENTING BLIGHTS. For discovering the best method of preventing blights on fruit-trees; the gold medal, or thirty guineas.

*The accounts and certificates* to be delivered on the second Tuesday in November, 1797.

83. TAKING OFF THE ILL EFFECTS OF BLIGHTS. For discovering a method of taking off the ill effects of blights on fruit-trees, verified by experiments; the gold medal, or thirty guineas.

*Accounts and certificates* to be delivered on the first Tuesday in February, 1798.

84. COMPARATIVE CULTURE OF WHEAT. For the best set of experiments made on eight acres, to determine the comparative advantages of cultivating wheat, by sowing broad-cast or drilling; the gold medal, or silver medal and twenty guineas.

*The accounts* to be produced on the first Tuesday in February, 1798.

86. COMPARATIVE CULTURE OF WHEAT. For the best set of experiments made on eight acres, to determine the comparative advantage of cultivating wheat, by broad-cast or dibbling; the gold medal, or silver medal and thirty guineas.

*The accounts* to be produced on the first Tuesday in February, 1798.

87. BEANS AND WHEAT. For planting or drilling, between December, 1795, and April, 1796, ten acres, with beans, and for sowing the same land with wheat in the year 1796; twenty guineas.

*Certificates* to be produced on the first Tuesday in November, 1797.

90. TURNEPS. For experiments made on six acres, to determine the comparative advantages of the drill or broad-cast method in the cultivation of turneps; the gold medal, or silver medal and ten guineas.

*To be delivered* on the third Tuesday in March, 1798.

92. VEGETABLE FOOD. For the best account of vegetable food, that will most increase the milk in mares, cows, and ewes, in March and April; the gold medal, or silver medal and ten guineas.

*Certificates* to be produced on the second Tuesday in November, 1797.

94. POTATOES FOR FEEDING CATTLE AND SHEEP. For cultivating, in 1796, not less than four acres, for the sole purpose of feeding cattle and sheep; the gold medal, or thirty guineas.

*Certificates* to be produced on the second Tuesday in November, 1797.

96. CULTIVATING ROOTS AND HERBAGE FOR FEEDING SHEEP AND BLACK CATTLE. For experiments made on two acres of land, between Michaelmas, 1796, and May, 1797, to ascertain which of the following plants can be

be

be secured for winter fodder to the greatest advantage, viz.

Turnep-rooted cabbage, carrots, turnep-cabbage, parsneps, turneps, potatoes.

The *accounts* and *certificates* to be produced on the first Tuesday in November, 1797; the gold medal.

97. **PARSNEPS.** For cultivating, in 1797, not less than five acres with Parsneps, for feeding cattle or sheep; the gold medal, or thirty guineas.

*Certificates* and *accounts* to be delivered on the second Tuesday in February, 1798.

99. **MAKING HAY IN WET WEATHER.** For discovering the best method of making hay in wet weather; the gold medal, or thirty guineas.

*Certificates* and *accounts* of the making the produce of six acres of land to be produced on the first Tuesday in January, 1798.

100\*. **HARVESTING CORN IN WET WEATHER.** For discovering the best method of harvesting not less than four acres of corn in wet weather; the gold medal, or thirty guineas.

*Certificates, accounts, and samples,* to be produced on the first Tuesday in January, 1798.

101. **CULTIVATING THE TRUE RHUBARB.** For raising, in the year 1797, not less than two thousand plants of the true rhubarb; the gold medal, or thirty guineas.

*Certificates* to be produced on the second Tuesday in February, 1798.

103. **ASCERTAINING THE COMPONENT PARTS OF ARABLE LAND.** For the most satisfactory experiments, to ascertain the due proportion of the several component parts of arable land, by an accurate analysis of it; the gold medal, or fifty guineas.

The *accounts* to be produced on the last Tuesday in November, 1797.

106. **FORMING AND APPLYING WATER MEADOWS.** For the best account of forming and applying Water-Meadows; the gold medal, or thirty guineas.

*Accounts* to be produced on the third Tuesday in February, 1798.

107. **IMPROVING LAND LYING WASTE.** For a method of improving 50 acres of soil's lying waste or uncultivated; the gold medal, or silver medal and twenty guineas.

108. For 25 acres; the silver medal and ten guineas.

The *accounts* to be produced on the second Tuesday in December, 1797.

113. **MANURES.** For the best set of

experiments to ascertain the comparative advantage of foot, coal-ashes, wood-ashes, lime, gypsum, or night-soil; the gold medal, or silver medal and twenty guineas.

The *accounts* to be produced on the last Tuesday in February, 1798.

115. **IMPROVING WASTE MOORS.** For the improvement of not less than one hundred acres of waste moor-land; the gold medal.

*Certificates* to be produced on the first Tuesday in February, 1798.

119. **GAINING LAND FROM THE SEA.** For an account of the best method of gaining from the sea not less than twenty acres of land; the gold medal.

*Certificates* to be produced on the first Tuesday in October, 1797.

123. **MACHINE FOR DIBBLING WHEAT.** For the best machine for dibbling wheat; the silver medal, or twenty guineas.

The *machine*, with *certificates*, to be produced on the second Tuesday in January, 1798.

124. **MACHINE TO REAP OR MOW CORN.** For a machine to reap or mow grain, by which it may be done cheaper than by any method now practised; the silver medal, or ten guineas.

The machine, with *certificates*, to be produced on the second Tuesday in December, 1797.

125. **IMPROVED HOE.** For the most improved horse or hand hoe, for cleaning the spaces between corn sown in equidistant rows, and earthing-up the plants; the gold medal, or twenty guineas.

To be produced, with *certificates* of its work, on the first Tuesday in December, 1797.

126. **DESTROYING THE GRUB OF THE COCKCHAFER.** For discovering a method of destroying the grub of the cockchafer; the gold medal, or thirty guineas.

The *accounts* to be delivered on the first Tuesday in January, 1798.

127. **DESTROYING THE WIRE-WORM.** For discovering a method of destroying the wire-worm; the gold medal, or thirty guineas.

The *accounts* to be delivered on the first Tuesday in January, 1798.

128. **DESTROYING THE FLY ON HOPS, AND CATERPILLARS IN ORCHARDS.** For discovering an easy method of destroying the fly on hops, and caterpillars in orchards; the gold medal, or thirty guineas.

*Certificates* to be delivered on the first Tuesday in February, 1798.

129. **CURE**



**129. CURE OF THE ROT IN SHEEP.** For discovering an effectual cure, verified by experiments; the gold medal, or thirty guineas.

*Accounts* of the cause and prevention, with *certificates*, to be produced on the first Tuesday in February, 1798.

**130. PREVENTING AND CURING THE ILL EFFECTS OF THE FLY ON SHEEP.** For discovering a method of preventing and curing those effects; the silver medal, or thirty guineas.

*Certificates* and *accounts* to be produced on the first Tuesday in December, 1797.

**132. PROTECTING SHEEP.** For protecting in bad seasons in the year 1797, by means of hovers or sheds, not fewer than five hundred sheep; twenty guineas.

*Accounts* of the advantages, and *certificates* of the utility, to be produced on the first Tuesday in March, 1798.

# **PREMIUMS FOR DISCOVERIES AND IMPROVEMENTS IN CHEMISTRY, DYING, AND MINERALOGY.**

**134. BARILLA.** For half a ton of merchantable barilla, made from any plant raised in Great Britain; the gold medal, or thirty guineas.

Twenty-eight pounds, with a *certificate*, to be produced on the first Tuesday in January, 1798.

**135. PRESERVING SEEDS OF VEGETABLES.** For a method of preserving the seeds of plants fit for vegetation; the gold medal, or thirty guineas.

To be communicated on the first Tuesday in December, 1797.

**137. SEPARATING THE SUGAR FROM TREACLE.** For discovering a cheap method of separating the saccharine substance of treacle in a solid form, not less than one hundred weight; the gold medal, or fifty guineas.

*Certificates* and *accounts*, with samples, to be produced on the first Tuesday in February, 1798.

**139. PRESERVING FRESH WATER SWEET.** For the best account, verified by trials, of a method of preserving fresh water during long voyages; the gold medal, or fifty guineas.

*Accounts*, and descriptions of the methods made use of, with thirty gallons of the water, to be produced on the last Tuesday in December, 1797.

**141. DESTROYING SMOKE.** For an account of a method of destroying the smoke of fires belonging to large works; the gold medal, or thirty guineas.

To be produced on the first Tuesday in January, 1798.

**143. CONDENSING SMOKE.** For the best method of condensing and collecting the smoke of steam-engines, &c.; the gold medal, or fifty guineas.

*Accounts*, *certificates*, and *specimens*, to be produced on the first Tuesday in December, 1797.

**145. CANDLES.** For discovering a method of making candles of resin, fit for common use; the gold medal, or thirty guineas.

To be delivered on the first Tuesday in December, 1797.

**146. REFINING WHALE OR SEAL OIL.** For disclosing a method of purifying oil from glutinous matter; the gold medal, or fifty guineas.

The process to be delivered on the second Tuesday in February, 1798.

**148. CLEARING FEATHERS FROM THEIR OIL.** For discovering a method of clearing goose feathers from their oil, superior to any known; the gold medal, or forty guineas.

*Accounts* and 40 lb. of feathers to be produced on the first Tuesday in February, 1798.

**149. SUBSTITUTE FOR OR PREPARATION OF YEAST.** For discovering a substitute for, or preparation of, yeast, that may be preserved six months; the gold medal, or thirty guineas.

*Specimens* to be produced on the last Tuesday in November, 1797.

**150. PROOF SPIRIT.** For making, in 1797, not less than one hundred gallons of Proof Spirit from articles not the food of man or cattle; the gold medal, or fifty guineas.

*Accounts* and ten gallons to be produced on the first Tuesday in January, 1798.

**151. PRESERVING SALTED PROVISIONS.** For discovering the cheapest method of preserving salted provisions from becoming rancid or rusty; the gold medal, or thirty guineas.

*Accounts* and *certificates* to be produced on or before the first Tuesday in February, 1798.

**153. INCREASING STEAM.** For a method of increasing the quantity or the force of steam, in steam-engines, with less fuel than is now employed; the gold medal, or thirty guineas.

To be communicated on the first Tuesday in January, 1798.

**154. PREVENTING THE DRY ROT IN TIMBER.** For discovering the cause of the dry rot in timber, and disclosing a method

method of prevention; the gold medal, or thirty guineas.

The *accounts* to be produced on the second Tuesday in December, 1797.

156. FINE BAR-IRON. For making ten tons with coak from coak-pigs, in England or Wales, equal to Swedish or Russian iron; the gold medal.

One hundred weight to be produced on the first Tuesday in January, 1798.

158. WHITE LEAD. For discovering a method of preparing white lead, in a manner not prejudicial to the workmen; the gold medal, or fifty guineas.

*Certificates* that a ton has been prepared, and the process, to be produced on the second Tuesday in February, 1798.

159. SUBSTITUTE FOR BASIS OF PAINT. For the best substitute for basis of paint, equally proper as white lead; the gold medal, or one hundred guineas.

Fifty pounds weight to be produced on the second Tuesday in November, 1797.

161. REFINING BLOCK TIN. For discovering a method of purifying block tin, so as to fit it for the purposes of grain tin; the gold medal, or fifty guineas.

The process, and one hundred weight of the tin, to be produced on the first Tuesday in November, 1797.

163. GLAZING EARTHEN-WARE WITHOUT LEAD. For discovering the most easily fusible composition for glazing ordinary earthen-ware without lead; the gold medal, or thirty guineas.

*Specimens* and *certificates* to be produced on the first Tuesday in February, 1798.

164. PURIFYING BRACKISH WATER. For discovering the best method of purifying brackish water, so as to fit it for the use of families; the silver medal and fifteen guineas.

*Certificates*, and an *account* of the method used, to be produced on the second Tuesday in February, 1798.

165. BLACK DYE ON COTTON. For the best black dye on cotton yarn superior to any in use; the gold medal, or thirty guineas.

*Accounts* and *certificates*, with five pounds of yarn so dyed, to be produced on the first Tuesday in February, 1798.

166. PRESERVING IRON FROM RUST. For a cheap composition to effectually preserve wrought iron from rust; the gold medal, or fifty guineas.

*Accounts* and *certificates*, with ten pounds of the composition, to be produced on the first Tuesday in January, 1799.

169. OPIUM. For preparing, in 1797, not less than twenty pounds weight from poppies grown in Great Britain, equal to foreign opium; the gold medal, or fifty guineas.

Five pounds, *certificates*, and *accounts*, to be produced on the last Tuesday in February, 1798.

170. For not less than ten pounds weight; the silver medal, or twenty guineas.

#### PREMIUMS FOR PROMOTING THE POLITE ARTS.

173. HONORARY PREMIUMS FOR DRAWINGS. For the best drawing by sons or grandsons of peers or peeresses of Great Britain or Ireland, to be produced on the first Tuesday in March, 1798; the gold medal.

174. For the next in merit; the silver medal.

175, 176. The same premiums will be given to daughters or grand-daughters of peers or peeresses of Great Britain or Ireland.

177. HONORARY PREMIUMS FOR DRAWINGS. For the best drawing of any kind, by young gentlemen under the age of twenty-one.

To be produced on the first Tuesday in March, 1798; the gold medal.

178. For the next in merit; the silver medal.

179, 180. The same premiums will be given for drawings by young ladies.

N.B. Persons professing any branch of the polite arts, or the sons or daughters of such persons, will not be admitted candidates in these classes.

181. DRAWING. For the best drawing, in Indian ink, of the statue of Joshua Ward, Esq. in the great room of the Society, not less than eighteen inches high; a silver medallion, in conformity to the will of John Stock, of Hampstead, Esq.

To be produced on the third Tuesday in February, 1798.

182. DRAWINGS OF OUTLINES. For an outline after a group or cast, in plaster, of human figures, by persons under the age of sixteen, to be produced on the last Tuesday in February, 1798, the greater silver pallet.

183. For the next in merit, the less silver pallet.

184. DRAWINGS OF LANDSCAPES. For the best drawing after Nature, by persons under twenty-one years of age, to be produced on the third Tuesday in February, 1798, the greater silver pallet.

185. For



185. For the next in merit, the less silver pallet.

186. **HISTORICAL DRAWINGS.** For the best original historical drawing of five or more human figures, to be produced on the third Tuesday in February, 1798, the gold pallet.

187. For the next in merit, the greater silver pallet.

188. **SURVEYS OF COUNTIES.** For an accurate survey of any county in England or Wales; the gold medal, or fifty guineas.

To be begun after the first of June, 1793, and produced on the last Tuesday in January, 1798.

192. **NATURAL HISTORY.** To the author who shall publish the natural history of any county in England or Wales; the gold medal, or fifty guineas. The work to be produced on or before the last Tuesday in January, 1798.

#### **PREMIUMS FOR ENCOURAGING AND IMPROVING MANUFACTURES.**

195. **SILK.** For ten pounds of silk, produced by one person in England, in the year 1797; the gold medal.

One pound, with certificates, to be delivered to the Society on the first Tuesday in January, 1798.

196. For five pounds; the silver medal.

197. **MACHINE FOR CARDING SILK.** For a machine for carding waste silk, to be produced on the first Tuesday in November, 1797; the gold medal, or thirty guineas.

198. **CLOTH FROM HOP-STALKS, OR BINDS.** For not less than thirty yards, twenty-seven inches wide, made in Great Britain, the gold medal, or thirty guineas; to be produced on the second Tuesday in December, 1797.

199. **WICKS FOR CANDLES OR LAMPS.** For discovering a method of manufacturing hop-stalks or other cheap material, the growth of Great Britain, to supply the place of cotton for wicks of candles or lamps; twenty guineas.

Five pounds of the wicks, with certificates, to be produced on the second Tuesday in January, 1798.

201. **PAPER FROM RAW VEGETABLES.** For ten reams of useful paper from raw vegetable substances; twenty guineas.

One ream and certificates to be produced on the first Tuesday in November, 1797.

#### **PREMIUMS FOR INVENTIONS IN MECHANICKS.**

202. **TRANSIT INSTRUMENT.** For a cheap and portable instrument, for the purpose of finding the latitudes and longitudes of places, the gold medal, or forty guineas; to be produced on the last Tuesday in January, 1798.

203. **TAKING WHALES BY THE GUN HARPOON.** For the greatest number, not less than three, by one person; ten guineas.

Certificates of the taking the whales to be produced on the last Tuesday in December, 1797.

205. **DRIVING BOLTS INTO SHIPS.** For a model of a machine for driving bolts, particularly copper, into ships, superior to any now in use; the gold medal, or forty guineas.

To be produced on the first Tuesday in February, 1798.

206. **PARISH OR FAMILY MILL.** For the best mill for grinding corn for private families or parish-poor; the gold medal, or forty guineas.

The mill and certificates to be produced on the first Tuesday in February, 1798.

207. **MACHINE FOR RAISING ORE.** To the person who shall invent a machine and produce a model for raising ore, &c. from mines, at a less expence than any in use; the gold medal, or fifty guineas.

To be produced on the second Tuesday in February, 1798.

208. **MACHINE FOR RAISING WATER.** For a machine for raising water out of deep wells, superior to any in use; the gold medal, or forty guineas.

Certificates and a model to be produced on the first Tuesday in February, 1798.

209. **PREVENTING WATER FREEZING IN PIPES.** For discovering a cheap method of preventing water freezing in pipes serving to supply dwellings; the gold medal, or thirty guineas.

Accounts and certificates to be produced on the first Tuesday in March, 1798.

210. **PREVENTING HORSES TURNING ABOUT IN MILLS.** For producing a model, shewing an easy method of preventing the necessity of horses turning about in drawing water from deep wells; the gold medal, or forty guineas.

To be produced on the first Tuesday in February, 1798.

211. **BORING ROCKS.** For discovering a more expeditious method than any in use of boring rocks in mines, &c.; the gold medal, or forty guineas.

Certificates and description of the method

thod to be produced on the first Tuesday in January, 1798.

**212. CLEANSING CHIMNEYS.** For the best apparatus for cleansing chimneys from soot, and preventing children being employed within the flues; the gold medal, or forty guineas.

The apparatus and *certificates* to be produced on the third Tuesday in January, 1798.

**213. PREVENTING INJURY TO PASSENGERS.** For the best method of preventing passengers in carriages being injured when the horses have taken fright; the gold medal, or thirty guineas.

*Certificates* of the utility of the invention to be produced on the second Tuesday in February, 1798.

**214. GUNPOWDER - MILLS.** For inventing and perfecting, in the year 1797, a method of conducting gunpowder-mills so as to prevent a probability of their blowing-up; the gold medal, or one hundred guineas.

*Certificates* and *accounts* to be produced on the first Tuesday in February, 1798.

Any attempts on this subject, though not fully adequate to preventing explosion, will be considered and rewarded according to their merit.

#### PREMIUMS OFFERED FOR THE ADVANTAGE OF THE BRITISH COLONIES.

**216. NUTMEGS.** For ten pounds weight of nutmegs, the growth of his Majesty's dominions in the West Indies, or Africa, the gold medal, or one hundred guineas.

*Certificates* to be produced on the first Tuesday in December, 1797.

**218. CINNAMON.** For twenty pounds weight, the growth of the islands in the West Indies, or the settlements in Africa belonging to the crown of Great Britain, imported in 1797, the gold medal, or fifty guineas. Samples to be produced on the first Tuesday in January, 1798.

**220. CLOVES.** For twenty pounds weight, the growth of the islands in the West Indies, or settlements in Africa belonging to the Crown of Great Britain, imported in 1797; the gold medal, or fifty guineas.

Samples and *certificates* to be produced on the first Tuesday in January, 1798.

**223. BREAD-FRUIT TREE.** For a plantation of not less than one hundred bread-fruit trees in any of the colonies of the West Indies, or Africa, subject to the Crown of Great Britain; the gold medal, or thirty guineas.

*Accounts* and *certificates*, with samples of the fruit, to be produced on the first Tuesday in January, 1798.

**227. KALI FOR BARILLA.** For cultivating two acres of land in the West Indies, or Africa, with Spanish Kali for making barilla; the gold medal, or 30 guineas.

**228.** For one acre, the silver medal, or fifteen guineas.

*Certificates*, with samples, to be produced on the second Tuesday in November, 1797.

**233. DESTROYING THE INSECT CALLED THE BORER.** For discovering an effectual method of destroying the insect called, in the West India islands or Africa, the Borer, so destructive to the sugar-cane; the gold medal, or fifty guineas.

The discovery to be ascertained, and delivered, with *certificates*, to the Society on the first Tuesday in January, 1798.

**235. BOTANIC GARDEN.** For inclosing and cultivating five acres in the Bahama islands as a botanic garden; the gold medal, or one hundred guineas.

*Certificates* to be produced on or before the first Tuesday in January, 1798.

**238. BHAUGULPORE COTTON.** For one ton imported into the port of London in the year 1798; the gold medal.

N. B. Cloths are made of this cotton of a nankeen colour without dying.

*Certificates*, signed by the secretary of the Board of Trade of Bengal, with samples, not less than ten pounds, to be produced to the Society on the last Tuesday in February, 1799.

**240. ANNATTO.** For not less than five hundred weight imported into the port of London from any of the British settlements in the East Indies in the year 1798; the gold medal.

*Certificates*, signed by the secretary of the Board of Trade of the respective settlement, that it is the produce of that settlement, with samples, not less than ten pounds, to be produced to the Society on or before the last Tuesday in February, 1799.

**242. TRUE COCHINEAL.** For not less than five hundred weight imported into the port of London from any of the British settlements in the East Indies in the year 1798; the gold medal.

*Certificates*, signed by the secretary of the Board of Trade of the respective settlement, that it is the produce of that settlement, with samples, not less than ten pounds, to be produced to the Society on or before the last Tuesday in February, 1799.

